

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)

2. (Currently Amended) The method as recited in Claim 21 wherein said selecting said next task comprises:

selecting a said next task from said tasks ~~based on said priority values and said status designations based on said priority values of said tasks and based on status designations representative of execution progress of said tasks,~~ wherein said status designations include executing, waiting, interrupted, completed, and unstarted;

starting said selected task and ~~designating~~ changing status designation of said selected task to an executing task;

if said executing task requests a waiting period, suspending said executing task and ~~designating~~ changing status designation of said executing task to a waiting task and repeating said selecting said next task and said starting said selected task;

if said waiting period elapses for any waiting task and said executing task has a higher priority value than said waiting task, ~~designating~~ changing status

designation of said waiting task to an interrupted task while allowing said executing task to continue execution;

if said waiting period elapses for any waiting task and said executing task does not have a higher priority value than said waiting task, suspending said executing task and designating changing status designation of said executing task to an interrupted task and repeating said selecting said next task and said starting said selected task; and

if said executing task completes execution, designating changing status designation of said executing task to a completed task and repeating said selecting said next task and said starting said selected task.

3. (Currently Amended) The method as recited in Claim 2 wherein said selecting said next task from said tasks includes:

selecting higher priority values before selecting lower priority values when possible.

4. (Currently Amended) The method as recited in Claim 2 wherein said selecting said next task from said tasks includes:

if a first particular task cannot be executed until a second particular task has completed execution, enabling selection of said first particular task after said second particular task has completed execution.

5. (Original) The method as recited in Claim 2 further comprising:
setting a timer based on said waiting period.

6. (Previously Presented) The method as recited in Claim 21 wherein said tasks are BIOS (Basic Input Output System) initialization tasks.

7. (Previously Presented) The method as recited in Claim 6 wherein a BIOS kernel receives said request for said particular waiting period.

8. (Canceled)

9. (Currently Amended) The computer-readable medium as recited in Claim 22 wherein said selecting said next task comprises:

selecting a said next task from said tasks ~~based on said priority values and said status designations~~ based on said priority values of said tasks and based on status designations representative of execution progress of said tasks, wherein said status designations include executing, waiting, interrupted, completed, and unstarted;

starting said selected task and ~~designating~~ changing status designation of said selected task to an executing task;

if said executing task requests a waiting period, suspending said executing task and ~~designating~~ changing status designation of said executing task to a waiting task and repeating said selecting said next task and said starting said selected task;

if said waiting period elapses for any waiting task and said executing task has a higher priority value than said waiting task, ~~designating~~ changing status

designation of said waiting task to an interrupted task while allowing said executing task to continue execution;

if said waiting period elapses for any waiting task and said executing task does not have a higher priority value than said waiting task, suspending said executing task and designating changing status designation of said executing task to an interrupted task and repeating said selecting said next task and said starting said selected task; and

if said executing task completes execution, designating changing status designation of said executing task to a completed task and repeating said selecting said next task and said starting said selected task.

10. (Currently Amended) The computer-readable medium as recited in Claim 9 wherein said selecting said next task from said tasks includes:

selecting higher priority values before selecting lower priority values when possible.

11. (Currently Amended) The computer-readable medium as recited in Claim 9 wherein said selecting said next task from said tasks includes:

if a first particular task cannot be executed until a second particular task has completed execution, enabling selection of said first particular task after said second particular task has completed execution.

12. (Original) The computer-readable medium as recited in Claim 9 further comprising:

setting a timer based on said waiting period.

13. (Previously Presented) The computer-readable medium as recited in Claim 22 wherein said tasks are BIOS (Basic Input Output System) initialization tasks.

14. (Previously Presented) The computer-readable medium as recited in Claim 13 wherein a BIOS kernel receives said request for said particular waiting period.

15. (Canceled)

16. (Current Amended) The system as recited in Claim 23 wherein said BIOS is operative to select said next initialization task to execute based on said priority values of said initialization tasks and based on status designations representative of execution progress of said initialization tasks, and wherein when executing said initialization tasks, said BIOS selects an initialization task having a higher priority value before selecting an initialization task having a lower priority value when possible.

17. (Previously Presented) The system as recited in Claim 23 wherein if a first particular initialization task cannot be executed until a second particular initialization task has completed execution, said BIOS enables selection of said

first particular initialization task after said second particular initialization task has completed execution.

18. (Previously Presented) The system as recited in Claim 23 further comprising:

a timer.

19. (Previously Presented) The system as recited in Claim 23 wherein said BIOS includes a BIOS kernel for receiving requests for said particular waiting period from said initialization tasks.

20. (Previously Presented) The system as recited in Claim 23 further comprising a plurality of hardware components.

21. (Currently Amended) A method of executing a plurality of tasks of different priority values, said method comprising:

utilizing preemptive multitasking and cooperative multitasking in execution of said tasks, wherein each task has a different priority value;

before starting any of said tasks, selecting and starting execution of a first task of said tasks, wherein said first task has highest priority value and is not dependent on completion of any other of said tasks;

while a said first task is executing, receiving a request for a particular waiting period from said first task;

for duration of said particular waiting period, suspending execution of said first task; and

~~selecting a next task to execute based on said priority values of said tasks and based on status designations representative of execution progress of said tasks~~, wherein said preemptive multitasking and said cooperative multitasking increase utilization of processing power of a processor and ensure higher priority valued tasks are executed with less interruption time than lower priority valued tasks.

22. (Currently Amended) A computer-readable medium comprising computer-executable instructions stored therein for performing a method of executing a plurality of tasks of different priority values, said method comprising:

utilizing preemptive multitasking and cooperative multitasking in execution of said tasks, wherein each task has a different priority value;

before starting any of said tasks, selecting and starting execution of a first task of said tasks, wherein said first task has highest priority value and is not dependent on completion of any other of said tasks;

while a said first task is executing, receiving a request for a particular waiting period from said first task;

for duration of said particular waiting period, suspending execution of said first task; and

~~selecting a next task to execute based on said priority values of said tasks and based on status designations representative of execution progress of said tasks~~, wherein said preemptive multitasking and said cooperative multitasking

increase utilization of processing power of a processor and ensure higher priority valued tasks are executed with less interruption time than lower priority valued tasks.

23. (Currently Amended) A system comprising:
a processor; and
a BIOS (Basic Input Output System) operative to utilize preemptive multitasking and cooperative multitasking to increase utilization of processing power of said processor and to ensure higher priority valued initialization tasks are executed with less interruption time than lower priority valued initialization tasks when executing a plurality of initialization tasks of different priority values, wherein each initialization task has a different priority value, wherein before said BIOS starts any of said initialization tasks, said BIOS is operative to select and to start execution of a first initialization task which has highest priority value and which is not dependent on completion of any other of said initialization tasks, wherein said BIOS is operative to receive a request for a particular waiting period from ~~an~~ said first initialization task while said first initialization task is executing, wherein said BIOS is operative to suspend execution of said first initialization task for duration of said particular waiting period, and wherein said BIOS is operative to select a next initialization task to execute ~~based on said priority values of said initialization tasks and based on status designations representative of execution progress of said initialization tasks.~~